

Empirical challenges in the study of EAs and their representativeness

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Work produced within the project

- ① Review available sources to measure affiliation to Employer Associations (EAs), study the reliability of these sources
- ② Study if EA affiliation responds to tax incentives

Project 1: broad motivation

- Huge body of empirical work on trade unions and their effects
- Much less on Employer Associations (EAs), even in countries with industry- or national-level bargaining
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 - Why?
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- A prerequisite to study EAs empirically is to have data on them
 - Key as well for statistical offices and policy making
 - Maybe the data is lacking, or not of sufficient quality?
 - We review this hypothesis for France

Contribution and results

- **Contribution is primarily methodological:**
 - ① Understanding the quality of typically available information on EAs
 - ② Discussing if it can be used to measure EAs representativeness and to do empirical research

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- **Main take aways:**
 - ① Contributions paid to EAs in financial statements looks like a promising new data source, but as of today it suffers from strong under-reporting
 - ② Membership rates based on EAs disclosed members or on surveys of establishments provide a relatively coherent picture
 - ③ But a lot of measurement error in surveys of establishments: may be problematic for econometric analyses

Data sources

3 ways of observing EA affiliation:

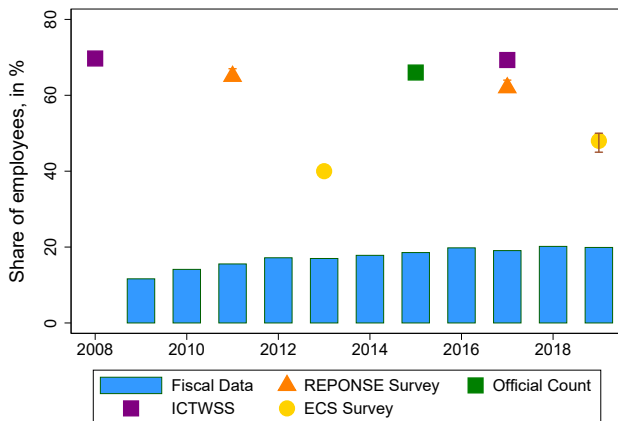
- ① **Surveys of establishments:** REPOSE Survey, European Company Survey (ECS)
- ② **Administrative fiscal data** (or tax returns): mandatory accounting reports (BICRN/BICIS)
- ③ **EAs disclosed membership:** ICTWSS, official count used to determine national representation since 2015

Table 1: EA membership in France from various sources: Summary

Source	Producer	Sample	Year	% of firms or estab.	% of employees
<i>Surveys of Establishments:</i>					
REPONSE 2017	Labour department	11+ empl. private	2017	50.2%	62.5%
ECS 2019	Eurofound	11+ empl. private	2019	39%	50%
<i>EAs disclosed membership:</i>					
ICTWSS	OECD/AIAS	private	2017	NA	69.3%
Official Count	Langevin (2019)	1+ private	2015	25%	66%
<i>Admin. Fiscal Data:</i>					
Firm tax returns	Treasury Directorate	1+ private	2017	20.1 %	19.1%

Share of workers covered by EAs

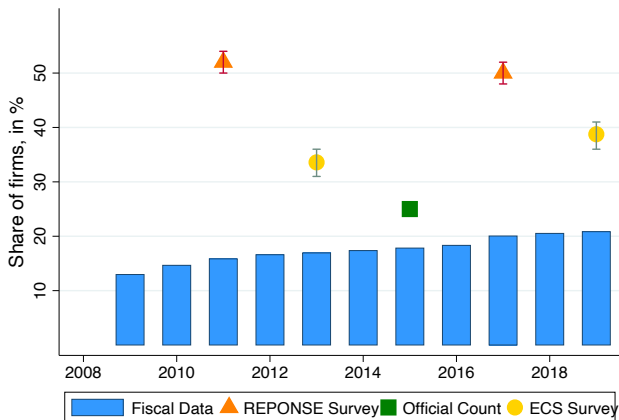
Figure 1: Share of private sector employees working in a firm affiliated to EAs since 2008. Estimates from various available data sources



Sources: BICIS-BIRCN, Reponse Survey, ECS

Share of firms covered by EAs

Figure 2: Share of firms/workplaces affiliated to EAs since 2008. Estimates from various available data sources



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Roadmap

- ① Discuss possible reasons for differences across sources
- ② Is survey data reliable?
- ③ Illustration: comparing determinants of affiliation in different sources

- 1 Introduction
- 2 Possible reasons
- 3 Focus on survey data
- 4 Comparing determinants of EA affiliation across surveys

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- Contributions paid only some years (tax returns): affiliated if paid past or next year
- Small versus large firms (tax returns and official statistics include small firms): imputations

Table 2: Affiliation rates in REPOSE 2017 and the tax returns 2017 for various subsamples

	REPOSE 2017			Tax returns 2017	
	<i>share of ...</i>	Workers	Workplaces	Firms	Workers
All firms	–	–	–	19.05	14.41
At least one employee	–	–	–	19.07	20.06
At least one empl., affiliated if has paid contribution any year between 2016 and 2018	–	–	–	25.64	25.51
11+ employees	62.54	50.21	48.69	18.85	22.4
Correcting for double counting	62.55	50.46	48.96		
<i>Mono versus multi-establishment firms (with 11 or more employees):</i>					
Multi (11+ employees)	66.89	54.58	54	17.63	22.27
Mono (11+ employees)	55.82	46.73	46.73	21.40	22.15
<i>Firms (with 11 or more employees) affiliated and non-affiliated to a group:</i>					
Do not belong to a group	52.97	47.41	46.42	22.34	23.44
Belongs to a group	68.08	53.9	53.91	16.48	19.36
Belongs to a group, affiliated if any firm contribute	–	–	–	52.76	38.98
All firms, affiliated if any firm contribute	–	–	–	40.47	27.37
<i>Estimates by firm or establishment size brackets:</i>					
1 to 10 employees	–	–	–	20.58	19.1
11 to 50 employees	46.95	44.94	45.14	22.72	22.65
51 to 250 employees	61.92	60.65	59.38	22.82	22.67
More than 250 employees	70.56	56.55	68.5	15.6	18.35

Partial conclusion

- **Partial conclusion**

- Official count and REPOSE survey give consistent picture of share of workers covered. Might be the good one?
- The low share of firms covered in official statistics remains puzzling
- ECS likely to under-estimate membership (see latter)
- Tax returns seem to strongly underestimate membership

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Work done

- 1 Membership rate: comparison ECS-REPONSE
 - Question in REPONSE better designed to capture affiliation
 - Question in ECS ignores important roles of EAs
- 2 Examine inconsistent responses between establishments of the same firm in REPONSE
- 3 Examine Inconsistent affiliation information between REPONSE and Tax returns after using firm identifiers to match datasets
- 4 Derive corrected rate of affiliation, rate of false positive and rate of false negative

Table 3: Conflicting responses between establishments from the same firm

	Affiliation to EAs		CFDT firm union delegate		Firm-level Pension plan	
	N	%	N	%	N	%
<i>Panel A: All firms having at least two establishments responding to the question</i>						
All say no	11	6.1	18	31.0	69	29.6
All say yes	92	51.4	23	39.6	117	50.2
Some yes, some no	76	42.5	17	29.3	47	20.2
<i>including half yes, half no</i>	46	25.7	6	10.34	23	9.9
Total	179	100	58	100	233	100
<i>Panel B: Firms with exactly two establishments in the survey</i>						
Both do not respond	6	4	94	62.7	0	0
Only one responds	43	28.7	30	20.0	5	3.3
Both say no	8	5.3	12	8.0	52	34.7
Both say yes	55	36.7	11	7.3	75	50.0
One yes, one no	38	25.3	3	2.0	18	12.0
Total	150	100	150	100	150	100

Table 4: Affiliation status in the tax returns and REPOSE for year 2017

	Not affiliated in REPOSE	Affiliated in REPOSE	Total
Does not contribute (tax returns)	907 <i>36.8%</i>	1,557 <i>63.2%</i>	2,464 <i>100%</i>
Contribute (tax returns)	200 <i>29.5%</i>	477 <i>70.5%</i>	677 <i>100%</i>
Total	1,107 <i>35.2%</i>	2,034 <i>64.8%</i>	3141 <i>100%</i>

Correcting for errors

- Notations:
 - p : true rate of affiliation
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 - $p = 0.43$: lower than average of 0.5 observed in the data
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- Error rates might be too large to allow for panel level analysis

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Looking at determinants of EA affiliation

- Simple statistical models. EA affiliation predicted by:
 - ① Firm size, industry and age
 - ② Corporate structure: foreign owner, family owner, listed, belongs to group, multi-site
 - ③ Firm collective bargaining: union delegate, work council, unionisation rate
- Exercise 1: predictors constructed using REPONSE 2017. EA affiliation measured in either REPONSE or tax returns. Compare the two
- Exercise 2: same regressions in REPONSE 2017 and ECS 2019. Compare the two

Determinants: results

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 - In REPOSE, we see middle-size firms and those with unions more likely to be affiliated
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- Exercise 2:
 - Being older than 50 y.o. and multi-site firm positively associated with EA affiliation in ECS, but not in REPOSE
 - Middle-size firms and those with unions more likely to be affiliated to EAs in REPOSE but not in ECS
 - \Rightarrow No consistent picture between the two (result to be confirmed)

Project 1: Conclusion

- Tax returns promising source but not entirely reliable
- Survey data seems reliable to measure aggregate affiliation rate but:
 - Framing of questions matter a lot and can lead to important differences
 - A lot of discrepancies across establishments: managers of local plants not aware of affiliation, suggesting services provided by EAs do not diffuse strongly within firms
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- Due to errors, important challenges to do empirical analysis with survey of establishments (in France)
- Can explain lack of empirical work, and challenges to get a consistent picture emerging
- Urgent need to improve data collection:
 - Firm-level surveys
 - Ask employers what they use EA for in large scale surveys

A word on project 2

- **Question:**
 - For firms making profits, paying contributions to EAs reduces their tax base
 - Do contributions paid to EAs depend on their profits?

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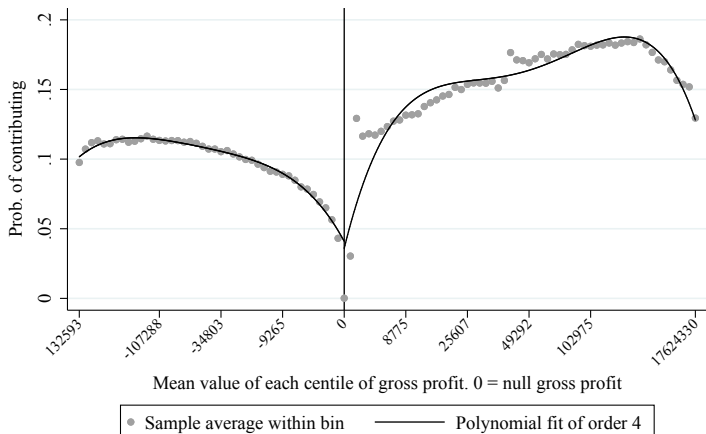
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- **Results:**

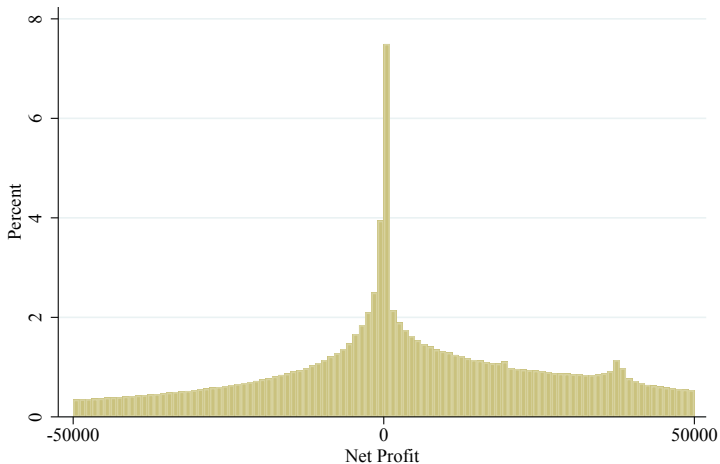
- Firms making positive profits much more likely to declare paying contributions
- The amount of contributions declared to tax authorities does not seem to follow any clear rule that EAs would set (it can be virtually anything)
- However, many of the firms declaring contributions pay an amount that put their taxable profits to 0
- Explanations: avoid administrative costs? contributions declared or paid only when convenient?

Probability of contributing



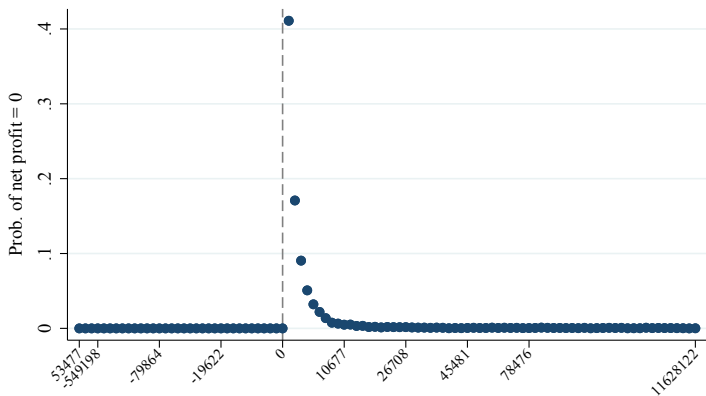
This figure shows the prob. of contributing to EA's by centile of gross profit
Here gross profit=0 is considered as a shift in firms' behaviour
Sources: BICRN (French fiscal admin. data), 2008-2019, N= 10620158

Distribution of net profit



Distribution of firm's net profit, zoomed in between -50000 & 50000
N= 10620158, Sources: BICRN (French fiscal admin. data), 2008-2019

Probability of reporting a null net profit while contributing



Mean value of each centile of gross profit. 0 = null gross profit

This graph shows the prob. of having a net profit = 0 whereas the firm reports positive EA's contributions.

Results are expressed as centiles of gross earnings (net+ contributions)

Sources: BICRN (French fiscal admin. data), 2008-2019, N= 1374103

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